

REMARKS

Reconsideration and allowance of the present application are respectfully requested. Claims 1-77 remain pending in the application. By the foregoing amendment claims 1, 40, 47, 54, 56, 59 and 67-71 are amended to expedite allowance.

Applicants note with appreciation the Examiner's indication on page 7 of the final Office Action that claims 23-28, 41-46 and 72-77 contain allowable subject matter.

Applicants wish to thank Examiner Wallenhorst for the helpful interview conducted on October 12, 2005. In attendance were attorneys Patrick C. Keane and Richard J. Kim, along with Dr. David F. Nicoli, the first named inventor.

During a recent review of the Office Action, two documents were identified by the inventors as being of general background interest. The two documents are being filed herewith in an Information Disclosure Statement for the Examiner's consideration and acknowledgement.

On page 2 of the Office Action, claims 40-77 are rejected under 35 U.S.C § 112, second paragraph, as being indefinite. Although this rejection is traversed, claims 40, 47 and 67 are hereby amended to address the Examiner's concerns. In addition, claims 1, 54, 56, 59 and 68-71 are amended with minor changes to address minor informalities. Withdrawal of the rejection is respectfully requested.

As discussed during the interview, claims 1 and 47 are amended to clarify that the phrase "detecting an increase" refers to a rate of agglomeration, a feature which broadly encompasses subject matter identified by the Examiner as allowable. That is, claims 1 and 47 are amended to recite "detecting an increase in rate of said

particle agglomeration as a measure of the stability." Claim 40 is amended to recite "detecting an increase in rate of said agglomeration using sensitive, quantitative means for determining the extent to which said sample has become less stable." The amendments clarify the original claimed feature of applying a stress factor to accelerate particle agglomeration, as discussed during the interview.

In numbered paragraph 4, page 2 of the final Office Action, independent claims 1 and 47, along with various dependant claims, are rejected under 35 U.S.C §102(b) as being anticipated by U.S. Patent No. 6,263,725 (Garver et al.). In numbered paragraph 5, page 3 of the final Office Action, independent claims 1 and 47, along with various dependant claims, are rejected under 35 U.S.C. §102(b) as being anticipated by Nicoli et al., "Particle size analysis of colloidal suspensions by SPOS compared to DLS: A sensitive indicator of quality and stability," American Laboratory, vol. 33(1), January 2001, pp. 32-39). In numbered paragraph 8, page 5 of the final Office Action, independent claim 40, along with various dependant claims, are rejected as being unpatentable over the Nicoli et al. article. In numbered paragraph 9, page 6 of the final Office Action, various dependant claims are rejected as being unpatentable over the Nicoli et al. article in view of Friberg et al. "Theory of Emulsions," Pharmaceutical Dosage Forms: Disperse Systems, Lieberman et al. (eds.), Vol. 1, 1988, page 66. These rejections are respectfully traversed.

As discussed during the Examiner interview, and as acknowledged by the Examiner, the foregoing documents do not teach or suggest a method or apparatus for determining the stability of a sample including, among other features, "detecting an increase in rate of said particle agglomeration as a measure of the stability," as recited in independent claims 1 and 47; and "detecting an increase in rate of said

agglomeration using sensitive, quantitative means for determining the extent to which said sample has become less stable," as recited in claim 40.

In contrast, the Garver et al. patent relates to a reversible, temperature driven phase transition to extract an undesirable colloidal pitch component from the water used for paper processing, and does not address using a stress factor to reduce a height of an interparticle potential energy barrier to accelerate particle agglomeration. The Nicoli et al. article relates to ascertaining snapshots of the quality of a sample as indicated by a particle size distribution of the latter. The Friberg et al. reference was applied for its disclosure of an application of salt concentration to switch an emulsion between stable, i.e., relatively unagglomerated, and unstable, i.e., highly agglomerated, states. None of these documents, considered individually or in the combination relied upon by the Examiner, teach or suggest applying a stress factor to a sample to reduce a height of an interparticle potential energy barrier so as to accelerate particle agglomeration, and/or detecting an increase in the rate of particle agglomeration.

As such, Applicants' independent claims 1, 40 and 47, along with all claims which depend therefrom, are allowable. All objections and rejections raised in the Office Action having been addressed, it is respectfully submitted that the application is in condition for allowance and a Notice of Allowance is respectfully solicited.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

Date: October 21, 2005

By: 

Patrick C. Keane

Registration No. 32,858

P.O. Box 1404
Alexandria, Virginia 22313-1404
(703) 836-6620